

1. A method of increasing motility of sperm, the method comprising the steps of:

a) providing from a subject a biological sample comprising sperm and at least one cytokine; and

b) contacting the biological sample with an agent that inactivates or reduces the biological activity of the at least one cytokine selected from the group consisting of TNF α , IL1 β , and IL6.

2. The method of claim 1, wherein the subject has a condition that impairs fertility.

10 3. The method of claim 2, wherein the condition is leukocytospermia.

4. The method of claim 1, wherein the subject has SCI.

15 5. The method of claim 1 wherein the biological sample comprises a fluid produced by the male reproductive tract.

6. The method of claim 1, wherein the biological sample comprises semen.

20 7. The method of claim 1, wherein biological sample comprises a fluid produced by the female reproductive tract.

8. The method of claim 1, wherein the agent is an antibody that specifically binds to the at least one cytokine.

9. The method of claim 8 wherein the at least one cytokine comprises TNF α .

10. The method of claim 8 wherein the at least one cytokine comprises IL1 β .

5 11. The method of claim 8 wherein the at least one cytokine comprises IL6.

12. The method of claim 1, wherein the agent is an antibody specifically binds to the at least one cytokine receptor selected from the group consisting of TNF α receptor, IL1 β receptor, and IL6 receptor.

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13. The method of claim 12, wherein the at least one cytokine receptor comprises a TNF α receptor.

14. The method of claim 12, wherein the at least one cytokine receptor comprises an
15 IL1 β receptor.

15. The method of claim 12, wherein the at least one cytokine receptor comprises an IL6 receptor.

20 16. The method of claim 1, wherein the agent is a soluble cytokine receptor that specifically binds to the at least one cytokine.

17. The method of claim 16, wherein the soluble cytokine receptor comprises a soluble TNF α receptor.

18. The method of claim 16, wherein the soluble cytokine receptor comprises a soluble IL1 β receptor.

5 19. The method of claim 16, wherein the soluble cytokine receptor comprises a soluble IL6 receptor.

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